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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/609,384

**Applicant(s)**

KODATE ET AL.

**Examiner**

Jeff Piziali

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/12/08, 10/3/07, 6/15/07, 2/8/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 8, 11 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10, 12, 13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/2/08 & 9/14/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of *Species I* (i.e., *Claims 1-7, 9, 10, 12, 13, and 15-17*) in the reply filed on 3 October 2007 is acknowledged and appreciated.
2. *Claim 11 is withdrawn* from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3 October 2007.
3. *Claims 8 and 14 were earlier withdrawn* from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 23 May 2006.
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Priority***

5. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "14" (see Fig. 5). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the figures.

***Specification***

8. The disclosure is objected to because of the following informalities:

The phrase, "***One of the reasons the liquid crystal displays are becoming***" should be corrected, for example to, "***One of the reasons liquid crystal displays are becoming***" (see Page 1, Line 9).

Appropriate correction is required.

9. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 2-7, 9, 10, 13, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*display signals*" (in line 3); "*display signals*" (in line 5); "*the display signal*" (in line 11); and "*the display signal*" (in line 17).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "*display signal*" limitations. For example:

Is a single, identical set of "*display signals*" being claimed? Or are distinct, different, and independent sets of "*display signals*" being claimed?

There does not appear to be any antecedent basis for "*the display signal*". Is either "*display signal*" limitation intended to be common to one of the earlier claimed sets of "*display signals*"? Or is each "*display signal*" limitation distinct, independent, and different from all the others?

Is a single, identical "*the display signal*" being claimed? Or are distinct, different, and independent "*display signals*" being claimed?

An omitted structural cooperative relationship results from the claimed subject matter: "*a plurality of data lines*" (in line 3); "*one data line*" (in line 6); "*a data line*" (in line 8); and "*a data line*" (in line 10).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "*data line*" limitations. For example:

Are any of the "*one/a data line*" limitations intended to be common to the earlier claimed set of "*data lines*"? Or is each "*data line*" limitation distinct, independent, and different from all the others?

Is a single, identical "*data line*" being claimed? Or are distinct, different, and independent "*data lines*" being claimed?

An omitted structural cooperative relationship results from the claimed subject matter: "*a supply of the display signal*" (in line 11) and "*a supply of the display signal*" (in line 17).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "*supply*" limitations. For example:

Is a single, identical "*supply*" being claimed? Or are distinct, different, and independent "*supplies*" being claimed?

13. Claim 2 recites the limitation "*the display signal*" (in lines 11 and 17). There is insufficient antecedent basis for this limitation in the claim.

14. Claim 2 is indefinite where it specifies "*predetermined scan line*" (in line 15), since "*predetermined*," according to applicant's definition, merely means "*determined beforehand*." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

15. Claim 3 recites the limitation "*the data line*" (in line 4). There is insufficient antecedent basis for this limitation in the claim.

For example: It would be unclear to one having ordinary skill in the art whether this limitation is intended to refer to "**one data line**" (in claim 2, line 6); "**a data line**" (in claim 2, line 8); and/or "**a data line**" (in claim 2, line 10).

16. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**a lower layer than the first pixel electrode**" (in line 4) and "**the lower layer than the second pixel electrode**" (in line 6).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "**layer**" limitations. For example:

Is the "**the lower layer**" lower than just the first pixel electrode? Or is the "**the lower layer**" lower than both the first pixel electrode and the second pixel electrode?

17. Claim 4 recites the limitation "**the surface of layers**" (in lines 4 and 7). There is insufficient antecedent basis for this limitation in the claim.

18. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.



An omitted structural cooperative relationship results from the claimed subject matter: *"the surface of layers"* (in line 4) and *"the surface of layers"* (in line 7).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the *"layers"* limitations. For example:

Is a single, identical set of *"layers"* being claimed? Or are distinct, different, and independent sets of *"layers"* being claimed?

19. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: *"the surface of layers"* (in line 4) and *"the surface of layers"* (in line 8).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the *"layers"* limitations. For example:

Is a single, identical set of *"layers"* being claimed? Or are distinct, different, and independent sets of *"layers"* being claimed?

20. Claim 5 recites the limitation *"the peripheral lower layer"* (in lines 4 and 9). There is insufficient antecedent basis for this limitation in the claim.

21. Claim 5 recites the limitation *"the area in which the first electrostatic shielding unit is disposed"* (in line 5). There is insufficient antecedent basis for this limitation in the claim.

22. Claim 5 recites the limitation "*the area in which the second electrostatic shielding unit is disposed*" (in line 9). There is insufficient antecedent basis for this limitation in the claim.

23. Claim 7 is indefinite where it specifies "*predetermined potential*" (in line 4), since "*predetermined*," according to applicant's definition, merely means "*determined beforehand*." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

24. Claim 9 is indefinite where it specifies "*predetermined potential*" (in line 4), since "*predetermined*," according to applicant's definition, merely means "*determined beforehand*." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

25. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "*a display signal*" (in line 3); "*display signals*" (in line 5); "*the display signal*" (in line 11); and "*the display signal*" (in line 17).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "*display signal*" limitations. For example:

Are any of the "*display signal*" limitations intended to be common to the claimed sets of "*display signals*"? Or is each "*display signal*" limitation distinct, independent, and different from all the others?

Is a single, identical "*a/the display signal*" being claimed? Or are distinct, different, and independent "*display signals*" being claimed?

An omitted structural cooperative relationship results from the claimed subject matter: "*a plurality of data lines*" (in line 3); "*one data line*" (in line 6); "*a data line*" (in line 8); and "*a data line*" (in line 10).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "*data line*" limitations. For example:

Are any of the "*one/a data line*" limitations intended to be common to the earlier claimed set of "*data lines*"? Or is each "*data line*" limitation distinct, independent, and different from all the others?

Is a single, identical "*data line*" being claimed? Or are distinct, different, and independent "*data lines*" being claimed?

An omitted structural cooperative relationship results from the claimed subject matter: "*a supply of the display signal*" (in line 11) and "*a supply of the display signal*" (in line 17).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "**supply**" limitations. For example:

Is a single, identical "**supply**" being claimed? Or are distinct, different, and independent "**supplies**" being claimed?

26. Claim 13 recites the limitation "**the display signal**" (in lines 11 and 17). There is insufficient antecedent basis for this limitation in the claim.

27. Claim 13 is indefinite where it specifies "**predetermined scan line**" (in line 15), since "**predetermined**," according to applicant's definition, merely means "**determined beforehand**." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

28. Claim 15 is indefinite where it specifies "**predetermined potential**" (in line 3), since "**predetermined**," according to applicant's definition, merely means "**determined beforehand**." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

29. Claim 17 recites the limitation "**one of source and drain electrodes**" (in line 2). There is insufficient antecedent basis for this limitation in the claim.

30. Claim 17 is indefinite where it specifies "***a predetermined scan line***" (in line 5) and "***another predetermined scan line***" (in line 7), since "***predetermined***," according to applicant's definition, merely means "*determined beforehand*." For example, see *Joseph E. Seagram & Sons, Inc. V. Marzall*, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).

31. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "***a predetermined scan line***" (in claim 17, line 5) and "***a predetermined scan line***" (in claim 2, line 15).

It would be unclear to one having ordinary skill in the art what, if any, structural and/or operational relationship exists between each of the "***predetermined scan line***" limitations. For example:

Is a single, identical "***predetermined scan line***" being claimed? Or are distinct, different, and independent "***predetermined scan lines***" being claimed?

32. The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

33. Claims 2-7, 9, 10, 13, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

As a courtesy to the Applicant, the examiner has attempted to also make rejections over prior art -- based on the examiner's best guess interpretations of the invention that the Applicant is intending to claim.

However, the indefinite nature of the claimed subject matter naturally hinders the Office's ability to search and examine the application.

Any instantly distinguishing features and subject matter that the Applicant considers to be absent from the cited prior art is more than likely a result of the indefinite nature of the claims.

The Applicant is respectfully requested to correct the indefinite nature of the claims, which should going forward result in a more precise search and examination.

***Claim Rejections - 35 USC § 102***

34. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

35. Claims 1-7, 9, 10, 12, 13, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by *Sakamoto (US 6,028,577 A)*.

Regarding claim 1, *Sakamoto* discloses an image display element [e.g., Figs. 7 & 10A; 1] comprising:

a plurality of data lines [e.g., Figs. 7 & 10A; 3] that supply display signals;

a plurality of scan lines [e.g., Figs. 7 & 10A; 2] that supply scan signals;

a first pixel electrode [e.g., Figs. 7 & 10A; 1(i, j)] and a second pixel electrode [e.g., Figs. 7 & 10A; 1(i+1, j)] that are supplied with display signals from one data line [e.g., Figs. 7 & 10A; 3(j)] (see the entire document, including Column 11, Lines 35-61);

a first electrostatic shielding unit [e.g., Fig. 7; 7a (left side)] that shields the first pixel electrode from an electric field produced by a data line that is adjacent to the first pixel electrode;

and

a second electrostatic shielding unit [e.g., Fig. 7; 7a (right side)] that shields the second pixel electrode from an electric field produced by a data line that is adjacent to the second pixel electrode (see the entire document, including Column 13, Lines 17-52).

Regarding claim 2, , this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, *Sakamoto* discloses an image display element [e.g., Figs. 7 & 10A; 1] comprising:

a plurality of data lines [e.g., Figs. 7 & 10A; 3] that supply display signals;

a plurality of scan lines [e.g., Figs. 7 & 10A; 2] that supply scan signals;

a first pixel electrode [e.g., Figs. 7 & 10A; 1(i, j)] and a second pixel electrode [e.g., Figs. 7 & 10A; 1(i+1, j)] that are supplied with display signals from one data line [e.g., Figs. 7 & 10A; 3(j)] (see the entire document, including Column 11, Lines 35-61);

a first electrostatic shielding unit [e.g., Fig. 7; 7a (left side)] that shields the first pixel electrode from an electric field produced by a data line that is adjacent to the first pixel electrode;

a second electrostatic shielding unit [e.g., Fig. 7; 7a (right side)] that shields the second pixel electrode from an electric field produced by a data line that is adjacent to the second pixel electrode (see the entire document, including Column 13, Lines 17-52);

a first switching device [e.g., Fig. 10B; 6(i, j)] that controls a supply of the display signal in the one data line, wherein the first switching device is electrically connected between the one data line and the first pixel electrode and has a gate electrode;

a second switching device [e.g., Fig. 10B; 6(i, j-1)] that is electrically connected between the gate electrode of the first switching device and a predetermined scan line; and

a third switching device [e.g., Fig. 10B; 6(i+1, j)] that is connected to the one data line and that controls a supply of the display signal to the second pixel electrode (see the entire document, including Column 11, Line 62 - Column 12, Line 67).

Regarding claim 3, *Sakamoto* discloses the first electrostatic shielding unit is formed by a first conductive layer [e.g., Fig. 8; 7a (left side)] that is disposed adjacent to the data line in a lower layer than the first pixel electrode [e.g., Fig. 8; 1(i, j)], and

the second electrostatic shielding unit is formed by a second conductive layer [e.g., Fig. 8; 7a (right side)] that is disposed adjacent to the data line in the lower layer than the second pixel electrode [e.g., Fig. 8; 1(i+1, j)] (see the entire document, including Column 13, Lines 55-59).



Regarding claim 4, *Sakamoto* discloses the first electrostatic shielding unit [e.g., Fig. 8; 7a (left side)] and the first pixel electrode [e.g., Fig. 8; 1(i, j)] have areas that are partially superimposed with each other in a direction that is perpendicular to the surface of layers, and the second electrostatic shielding unit [e.g., Fig. 8; 7a (right side)] and the second pixel electrode [e.g., Fig. 8; 1(i+1, j)] have areas that are partially superimposed with each other in the direction that is perpendicular to the surface of layers (see the entire document, including Column 13, Lines 55-59).

Regarding claim 5, *Sakamoto* discloses a first capacitor line [e.g., Figs. 7 & 10B; C2] that is disposed in an area partially superimposed with the first pixel electrode in the direction that is perpendicular to the surface of layers in the peripheral lower layer of the first pixel electrode facing the area in which the first electrostatic shielding unit is disposed, and that is connected to the first electrostatic shielding unit; and

a second capacitor line [e.g., Figs. 7 & 10B; C1] that is disposed in an area partially superimposed with the second pixel electrode in the direction that is perpendicular to the surface of layers in the peripheral lower layer of the second pixel electrode facing the area in which the second electrostatic shielding unit is disposed, and that is connected to the second electrostatic shielding unit (see the entire document, including Column 13, Line 65 - Column 14, Line 6).

Regarding claim 6, *Sakamoto* discloses the first electrostatic shielding unit and the second electrostatic shielding unit are electrically connected to each other (see the entire document, including Fig. 7; Column 13, Lines 17-28).

Regarding claim 7, *Sakamoto* discloses the first electrostatic shielding unit and the second electrostatic shielding unit are electrically connected to a wiring structure that has a predetermined potential (see the entire document, including Fig. 7; Column 13, Lines 17-59).

Regarding claim 9, *Sakamoto* discloses the first electrostatic shielding unit and the second electrostatic shielding unit are connected to a potential supply line that has a predetermined potential (see the entire document, including Fig. 7; Column 13, Lines 17-59).

Regarding claim 10, *Sakamoto* discloses the predetermined potential is maintained within a range of a potential variation of the pixel electrode (see the entire document, including Fig. 7; Column 13, Lines 17-59).

Regarding claim 12, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, *Sakamoto* discloses a data line driving circuit [e.g., Fig. 10A; 5] and a scan line driving circuit [e.g., Fig. 10; 4] (see the entire document, including Column 11, Lines 35-58).

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claims 1, 2, and 12.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 9.

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claim 10.

Regarding claim 17, **Sakamoto** discloses the gate electrode [e.g., Fig. 10B; 6(i, j) gate] of the first switching device [e.g., Fig. 10B; 6(i, j)] is electrically connected to one of source [e.g., Fig. 10B; 6(i, j-1) source] and drain [e.g., Fig. 10B; 6(i, j-1) drain] electrodes of the second switching device [e.g., Fig. 10B; 6(i, j-1)],

wherein a gate electrode [e.g., Fig. 10B; 6(i, j-1) gate] of the second switching device [e.g., Fig. 10B; 6(i, j-1)] is electrically connected to a predetermined scan line [e.g., Fig. 10B; 2i], and

wherein the other one of the source [e.g., Fig. 10B; 6(i, j-1) source] and drain [e.g., Fig. 10B; 6(i, j-1) drain] electrodes of the second switching device is electrically connected to another predetermined scan line [e.g., Fig. 10B; (2i+1)] (see the entire document, including Column 11, Line 62 - Column 12, Line 67 -- wherein all of the switching devices, gate electrodes, source electrodes, drain electrodes, and scan lines in **Sakamoto's** display device are "*electrically connected*" together in a single, large electrical circuit).

#### ***Response to Arguments***

36. Applicant's arguments filed 8 February 2006 have been fully considered but they are not persuasive.

The Applicant contends, "*In its rejection of claim 1, the Office Action asserts the left-side element 7a as shown in Figure 7 of Sakamoto corresponds to the claimed first electrostatic*

*shielding unit, and that the right-side element 7a as shown in Figure 7 of Sakamoto corresponds to the claimed second electrostatic shielding unit. Applicant respectfully disagrees. In particular, as described in column 13 of Sakamoto, elements 7a as shown in Figure 7 of Sakamoto correspond to 'fixed potential electrodes', whereby they 'have a function of increasing the storage capacitance of the corresponding pixel electrodes 1.' See column 13, lines 29-31 of Sakamoto. Thus, the elements 7a of Sakamoto do not correspond functionally and in operation to the claimed first and second electrostatic shielding units which shield pixel electrodes from an electric field produced by a data line that is adjacent the pixel electrodes" (see Pages 10-11 of the Response filed 8 February 2006). However, the examiner respectfully disagrees.*

Figure 8 of Sakamoto is very nearly identical to Figure 3 of the instant invention:

Sakamoto's 1st pixel electrode [Fig. 8; 1(i, j)] ~ instant 1st pixel electrode [Fig. 3; 3].

Sakamoto's 2nd pixel electrode [Fig. 8; 1(i+1, j)] ~ instant 2nd pixel electrode [Fig. 3; 4].

Sakamoto's data line [Fig. 8; 3(j)] ~ instant data line [Fig. 3; 9].

Sakamoto's 1st conductive layer [Fig. 8; left 7a] ~ instant 1st conductive layer [Fig. 3; 11].

Sakamoto's 2nd conductive layer [Fig. 8; right 7a] ~ instant 2nd conductive layer [Fig. 3; 12].

Sakamoto teaches, "*This conductive film 7 defines fixed-potential electrodes 7a and 7b to which a fixed electric potential is applied on operation*" (see Column 13, Lines 18-20).

The instant invention teaches, "*the electrostatic shielding layers 11 and 12 have a predetermined potential*" (see Page 20, Lines 2-3).

Sakamoto teaches an identical structural arrangement to that instantly claimed. Sakamoto teaches using an identical conductive material to that instantly claimed. Sakamoto teaches an identical fixed potential operation to that instantly claimed.

Moreover, Sakamoto discloses, "*The conductive film is applied with a fixed voltage. The parasitic capacitance between the data line and adjoining pixel electrodes is suppressed by shielding the electric field directed from the data line toward the pixel electrodes*" (see Column 7, Lines 30-35).

Sakamoto also discloses, "*there is an additional advantage that the distances from the first and second pluralities of fixed-potential electrodes to the adjoining first and second pluralities of scanning lines and the adjoining data lines are decreased due to the electric-field shielding structure*" (see Column 9, Lines 10-25).

Sakamoto also discloses, "*since the combination of the fixed-potential electrodes 7b and 11 forms an electric-field shielding structure, the capacitances of the parasitic capacitors C1 and C2 scarcely vary dependent on the distances L1 and L2. As a result, the distances from the pixel electrodes 1 and the data lines 2 or scanning lines 3 are decreased due to the electric-field shielding structure*" (see Column 16, Line 65 - Column 17, Line 4).

The "*electric field shielding*" benefits of Sakamoto are inherent, implicitly taught, and explicitly disclosed by Sakamoto.

In response to applicant's argument that "*the elements 7a of Sakamoto do not correspond functionally and in operation to the claimed first and second electrostatic shielding units which shield pixel electrodes from an electric field produced by a data line that is adjacent the pixel electrodes*", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

The Applicant next contends, "*In its rejection of claim 2, which has now been placed in independent form, the Office Action asserts that Sakamoto discloses a second switching device [Fig. 10B; 6(i, j-1)] that is electrically connected between the gate electrode of the first switching device and a predetermined scan line. However, even if element 6(i, j-1) of Sakamoto could be considered to correspond to the claimed second switching device, that element 6(i, j-1) is connected to the same scan line 2(i) as the so-called first switching device 6(i, j), as seen in Fig. 10B of Sakamoto, and is not connected between a gate electrode of element 6(i, j) and a predetermined scan line*" (see Page 11 of the Response filed 8 February 2006). However, the examiner respectfully disagrees.

**Sakamoto** discloses a first switching device [Fig. 10B; 6(i, j)] that controls a supply of the display signal in the one data line [Fig. 10A; 3(j)], wherein

the first switching device [Fig. 10B; 6(i, j)] is electrically connected between the one data line [Fig. 10A; 3(j)] and the first pixel electrode [Fig. 10A; 1(i, j)] and has a gate electrode [Fig. 10B; 6(i, j) gate];

a second switching device [Fig. 10B; 6(i, j-1)] that is electrically connected between the gate electrode [Fig. 10B; 6(i, j) gate] of the first switching device [Fig. 10B; 6(i, j)] and a predetermined scan line [Fig. 10B; 2i extending from scanner driver 4 to the gate of the second switching device 6(i, j-1)] (see Column 11, Line 62 - Column 12, Line 67).

Applicant's arguments with respect to claims 2-7, 9, 10, 13, and 15-17 have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

***Conclusion***

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/  
Primary Examiner, Art Unit 2629  
15 July 2008